'Too Much Energy, Too Soon By John P. Holdren

Berkeley, Calif.—The United States is threatened far more by the hazards of too much energy, too soon, than by the hazards of too little, too late.

The hazards of too much, which have been as widely underestimated as the liabilities of too little have been exaggerated, include diverting financial resources from compelling social needs, making hasty commitments to unproved technologies, and generating environmental and social costs that harm human weifare more than the extra energy improves it.

The idea that slower growth of energy use is better follows from several lines of reasoning—all supported by an accumulating volume of evidence.

First, rapid growth of energy use fosters expensive mistakes. The pressure of growth encourages the nation to seize any and all sources of supply that seem available. Some of these sources seized in haste are overpriced, some will prove unreliable and hence even more expensive than anticipated, some will produce unexpected environmental and social burdens.

Second, even at slower growth rates, a point exists beyond which more energy can do more harm than good.

The relation of energy to well-being, in other words, is two-sided. Through its productive application in economic-technological systems, energy fosters well-being; but the environmental and social effects of mobilizing and using energy can undermine well-being by means of direct damage to health, property, and human values, and by disrupting indispensable "public-service" functions of natural systems (climate regulation, fertility maintenance, waste disposal, controls on pests and disease organisms).

The higher the level of energy use already attained, the more likely it is that the economic-technological benefits of an additional unit of energy will be outwelghed by the social and environmental costs. Mounting evidence suggests that the United States is approaching (if not beyond) the level where further energy growth costs more than it is

worth.

Third, conservation of energy can mean doing better, not doing without. The essence of conservation is the art of extracting more well-being from each gallon of fuel and each kilowatt-hour of electricity. There is enormous potential for improvement here by raising efficiencies in homes, offices, transportation and industry.

portation, and industry.

Of course, other approaches to energy conservation could involve changes in individual behavior, and critics of conservation are quick to suggest that what is implied here is a return to a primitive existence.

In a society that uses its 5,000-pound automobiles for half-mile round trips to the market to fetch a six-pack of beer, consumes the beer in buildings that are overcooled in sumemr and overheated in winter, and then throws the aluminum cans away at an energy loss equivalent to a third of a gallon of gasoline per six-pack, this "primitive existence" argument strikes me as the most offensive kind of nonsense.

Fourth, saving a barrel of oil is generally cheaper than producing a barrel. Reducing waste through higher efficiency makes more energy available for genuine needs, but at smaller economic cost than the alternatives of more mining, more drilling, and more power plants. In this sense, conservation is the cheapest new energy source.

Finally, less energy can mean more employment. The energy-producing industries comprise and most capital-intensive and least labor-intensive major sector of the economy. Accordingly, each dollar of investment capital taken out of energy production and invested in something elapproved for Releast 2001/12/109/17/109/1

consumption dollar saved by reduced energy use and spent elsewhere in the economy, will create more jobs than are lost.

The notion of a one-to-one between energy use and well-being is the most dangerous delusion in the energy-policy arena. Sweden, Denmark and Switzerland all had higher gross national products per capita in 1974 than did the United States, despite energy use per capita around half that in the United States or less.

It is time we studied how the frugal Europeans get so much prosperity from so little energy. By carving the fat from our energy budget and wisely applying these savings, we probably could hold United States energy growth between now and the year 2000 to 1 per cent per year, instead of the 3 to 4 per cent so widely forecast. If our goal to maximize human well-being, accounting both for the benefits of energy use and the likely costs, we should not aim at more energy growth than this, and I believe it possible we should even aim at less.

U.S. INTERVENES IN ANGOLA STRIFE

HON. SHIRLEY-CHISHOLM

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Thursday, December 18, 1975

Mrs. CHISHOLM Mr. Speaker, certainly all of us are apprised of the current crisis in Angola, the involvement of the U.S. Government in that conflict, and the potential for more unilateral conflict that situation poses because of the forces bearing down in that small African country.

The Black Caucus has uniformly deplored all intervention in the war in Angola not only because of the covert manner of U.S. involvement, but also because the CIA has defied the mandate of the Organization of African Unity opposing all foreign intervention.

Like the War in Indochina, U.S. involvement in the initial stages has relied on an information "black out". We are only learning now of money already spent and of actions already taken because of State Department decisions to interfere to counter actions taken by the Soviet Union.

I would like to submit for review of my colleagues an in depth analysis of the situation in Angola and the role of the United States in it. The history of our covert activity is important in understanding why it is essential that no more aid be approved for any actions in Angola. The following was prepared by the Washington Office on Africa, an invaluable source for information on the topic:

U.S. INTERVENES IN ANGOLAN STRIFE

Since the Portuguese coup of April, 1974, the process of decolonization in Angola has proven far more tortuous and complex than in the former sister territories of Mozambique and Guinea-Bissau. In the latter two colonies, power was transferred to single, relatively unified liberation movements which acceded to independence and envereignty in orderly fashion. In Angola, the presence of three movements divided on p litical, ideological and geographic and ethnic lines has prevented a simple transition from colony to independence. These divisions, together with strategic considerations and Angola's

tervention in the decolonization process by external powers. The United States has been prominent among these outside forces, and recent evidence has provided a clearer, though still very incomplete, picture of the nature of U.S. intervention.

In a front page New York Times article of September 25, Leslie Gelb revealed that the U.S. Central Intelligence Agency has been buying arms for two liberation movements, FNLA and UNITA, in an effort to offset the military success of the third movement, MPLA, which has received significant arms support from the Soviet Union. The Times story states that the CIA operations have been approved by President Ford and are being carried out, as prescribed by law, with the knowledge of several Congressional committees. These include the Senate and House Armed Forces and Appropriations Committees, and the Senate Foreign Relations and House International Relations Committees. In each case CIA oversight has been delegated to subcommittees dominated by conservatives, or to individual ranking members.

CIA support for FNLA has a long history: acdording to Gelb, in 1962 the Agency and President Kennedy selected FNLA leader Folden Roberto as a man to back for the future, since Portugal could not be expected to retain Angola indefinitely. Support waned in 1969 but the CIA reactivated its Roberto connections last spring, in light of the upsurge in liberation activities following the Portuguese coup.

The CIA interest in UNITA is much more recent. Gelb's report on this connection followed a few days after an announcement by UNITA President Savimbi that he is receiving armaments from "anti-Communist Western nations and their allies" (according to Africa News). Jonas Savimbi, who heads UNITA, is avowedly anti-communist and anti-MPLA -- two reasons for the CIA's interest in him. He may also be emerging as a more realistic possibility than Roberto as a future contender for leadership of Angola. Savimbi is a magnetic figure with considerable popular support from the rural peasantry of central and southern Angola, and is rsonally attractive to some progressive African leaders in other countries.

U.S. aid to the two movements is being disbursed largely through President Mobutu Sese Seko of Zaire. Indeed, it is impossible to approach the subject of Angola and U.S. intervention there without examining Zaire's relationship with both Angola and the United States. Zaire shares a long border with Angola; the BaKongo people, who comprise the bulk of FNLA's supporters, straddle this bor-der. Holden Roberto of FNLA is Mobutu's brother-in-law. It is not surprising, then, that Mobutu's Zaire government has long. been an open supporter of FNLA. Mobutu's support for UNITA is much less solid, and seems primarily based on UNITA's shared opposition to FNLA's main enemy, MPLA. An instance of U.S.-Zaire connection with UNITA was reported by an expert eye-witness recently. He saw a Hercules transport plane offloading arms at Silva Porto, UNITA's head-The French-speaking crew quarters. The French-speaking crew was smoking Zairean cigarettes; the U.S. sold the Hercules aircraft to Zaire last year.

Establishing and maintaining the stability of Mobutu's staunchly pro-western rule in Zaire has, of course, been a cornerstone of U.S. policy in Africa since the General seized power in 1965. The CIA has long had a principal Africa station in Zaire, U.S. Zaire relations received a jolt in June of this year when Mobutu expelled U.S. Ambassador Deane Hinton, accusing him and the CIA of complicity in a coup plot. Nathaniel Davis, the Assistant Secretary of State for African Affairs who was traveiling in Africa at the time, tried to go to Zaire to repair relations, but was refused entry. (Mobutu had earlier in the way composed Davis prominalion to his

post, precisely because of Davis' implication

in CIA activities in Chile.)

The task of patching up things with Mobutu fell to Sheldon Vance, a former ambassador to Zaire, now a senior aide to Kissinger. Vance made two trips to Zaire, and then began to put together a new package of U.S. aid for Mobutu. The package totals \$60 million-4 times the 1975 level, 7 times the 1974 level, and \$20 million higher than the annual average of U.S. aid during the peak years of U.S. assistance in the crisis period of the 1960's. It is divided into \$20 million in Export-Import Bank loans; \$20 million in Food for Peace credit, and \$20 million for "Security Supporting Assistance"—which ex-ists to "support or promote economic or political stability." The State Department rationale for the package has been Zaire's balance of payments problems stemming from a drop in price of its copper exports and a rise in import costs, especially for oil. Vance and other State Department officials have also approached U.S. private creditors to assist in the rescheduling of Zaire's considerable foreign debt.

In July Vance and Deputy Assistant Sec-

retary for Africa Edward Mulcahy discussed the package with several Senators and Congressmen, hoping that a low-key approach would gain their acquiescence while avoiding publicity. Reaction on the Hill to State's approach was decidedly negative. Although the Ex-Im Bank and Food for Peace portions require no specific Congressional approval, Senators Clark and Humphrey insisted that the Security Supporting Assistance be fully scrutinized. Closed hearings on this part of the package are to be held in the near future.

In short, the Administration is seeking to underwrite the finances of the Mobutu government with a quantum leap in its level of aid. Since Mobutu is actively involved in the Angolan civil war and is the conduit for U.S. involvement, this move seems to have considerable implications for the Angolan scenario.

More evidence of increasing Administra tion interference in Angola has emerged in the revelation that Nathaniel Davis-according to news reports of September 1-plans to resign shortly from his post as Assistant Secretary for African Affairs. The ostensible reason is his inability to establish good relations with African states and their leaders, as his problem with Mobutu demonstrates A high-ranking source in the State Department, however, contends that the immediate reason for Davis' departure is his disagreement with Henry Kissinger over Angolai.e., Davis balked at Kissinger's proposals for stepped-up intervention there. Davis may have resisted because he feared yet another CIA blot on his record, which would confirm what was predicted by his opponents at the time of his nomination. Many observers expect Davis' successor to be Sheldon Vance. Whether or not Davis objected to Angolan intervention, he surely could not implement it effectively if he could not work with the other major actors in the Angolan arena.

On another front, when Senators Clark and Brooke proposed an amendment to this year's foreign economic aid bill which would specify. \$30 million for assisting the former Portuguese territories, the Agency for International Development suggested that \$25 million of this be ear narked for resettle-ment of black Angolan refugees. Most such refugees are Bakongo eturning to Angola from Zaire. But the Senators caught the political implications o' the language and specified in the report accompanying the bill that no aid should go toward "refugee or economic assistance that would constitute political support for any one of the liberation

the country by a strip of Zairean territory. Cabinda is where Gulf Oil produces 100,000 barrels of oil a day. MPLA currently controls the area, and all the Angolan liberation movements favor keeping Cabinda part of Angela. But a Cabindan separatist organization, FLEC, has recently emerged into the limelight, FLEC is presently located in and is heavily backed by Zaire, which is known to have an interest in the oil; some experts predict Zairean attempts to dominate or even annex Cabinda in the future. Clearly Cabinda is also a focus of external interests, both private and governmental.

The United States is not, of course, the only external power involved in Angola. The Soviet Union has given considerable sup-port, especially in arms, to MPLA, China has provided some assistance to FNLA, including military advice. Numerous indications and allegations of intervention have been aired concerning other countries such as France, Tunisia, Zambia and South Africa.

The Soviet Union's arms deliveries to MPLA make opposition to U.S. intervention more difficult. It can be cogently argued that a "Soviet-engineered takeover" of the Angolan government is no more desirable than a similar CIA effort. The problem, however, is that any Soviet presence in a particular country is so often exaggerated, and used as justification for significant American subversion of the internal political process. Furthermore, warnings of dangerous Soviet intervention from American officials should hardly be taken at face value, when accompanied by pious denials of U.S. interference. In a major Africa policy statement on September 23, Secretary Kissinger stated that one of the three major U.S. concerns was "that the continent be free of great power rivalry or conflict." He added a "cautionary word" specifically about Angola: "We are most alarmed at the interference of extracontinental powers who do not wish Africa well, and whose involvement is inconsistent with the promise of true independence."

One task, then, is to judge the degree of Soviet support for, and control over, the movement they are backing—MPLA. Soviet arms have been used to some extent by MPLA for several years; but according to the respected British journalist David Martin, the principal arms shipments came last spring, in response to a massive movement of FNLA troops from Zaire to Angola. It is notable that MPLA has sought good relations with China (despite the latter's moderate support for FNLA) by sending two top level MPLA delegations for visits: hardly the behavior expected from a Soviet puppet. MPLA also is maintaining good relations with Gulf Oil, and has recently softened its position on post-independence nationalization.

The evidence, then, that MPLA is completely under the Soviet thumb is unconvincing. Such a figure as Senator Dick Clark, Chairman of the Africa Subcommittee of the Senate Foreign Relations Committee, who visited Angola and met with the presidents of all three movements in August, came away firmly convinced that nothing in the situation justifies U.S. intervention. The problem may be best expressed by one of Leslie Gelb's government sources: "It's just that we can't keep our hands out of anything.'

In general, we feel any effort to stop U.S. intervention in Angola should be supported. Several amendments are being considered to the military ald bill, which the Administration has yet to submit and which Congress will probably pass on by mid-November. Specifically, the Security Supporting Assistance to Zaire should be opposed, since there is too much possibility that Angola movements will be the beneficiaries of it. should support an amendment which Clark

resolution urging negotiations with the Soviet Union on mutual restraint in Angola. An aide to Congressman Diggs has suggested that such negotiations include not only the major powers of East and West but those on the African continent as well.

There is a persisting doubt, however, that steps such as these will affect only the proverbial "tip of the iceberg" of U.S. policy in central and southern Africa. Significant policy operations have proceeded and are proceeding covertly under the rubric: "CIA" The American people have not been informed of these actions and have, in fact, been deliberately been misled concerning them. The whole range of policy, covert and overt, appears to amount to an unwarranted and immoral intrusion to guarantee a government friendly to the U.S. interests. But it will be impossible to debate U.S. policy, and to propose effective alternatives to it, when so much remains hidden from public view.

In a situation so murky we need your ideas

and analyses concerning these issues. We welcome your response.

A LESSON IN QUESTIONNAIRE-MANSHIP

HON. ABNER J. MIKVA

OF ILLINOIS

IN THE HOUSE OF REPRESENTATIVES Thursday, December 18, 1975

Mr. MIKVA. Mr. Speaker, the first lesson which every new Member of Congress must learn is to carefully scrutinize their list of constituents for the names of any former Members of Congress. The second lesson is to omit those names from the list of recipients of questionnaires, because ex-Members of Congress invariably respond with more information than you expected. I would like to demonstrate the dangers of failing to master these lessons by inserting the response to Congressman DAVE Evans' questionnaire submitted by Judge Andrew Jacobs, Sr., a former Member of this House of Congress. The depth and lucidity of Judge Jacobs' response should come as no surprise to those of us who have witnessed the sagacity of his son, our colleague. Congressman Andrew JACOBS, JR., or to those fortunate enough and senior enough to remember the distinguished service of Congressman Andrew Jacobs, Sr.

The questionnaire follows:

INDIANAPOLIS, IND. December 1, 1975.

Re Crime Poll. Congressman Dave Evans,

Congress of the United States, House of Representatives, Washington, D.C. DEAR CONGRESSMAN EVANS: Interrogatories

never afford built-in space for adequate answers. Hence I will comment upon yours seriatim:

1. Do you favor any type of strict gun control legislation? Yes-No-Please explain.

Every firearm should be registered with identifying ballistics data and other indicia. This is a proper subject for Federal jurisdiction, although penal enforcement could be concurrent with State Courts as a clear exception provided to 18 U.S. Code 3231, But constitutionally, I believe, enforcement must be optional, not mandatory upon State Courts. Licensing, to carry guns, thusly regmovements in Angola."

A further complication in the Angolan turm moil revolves arapproved For Release 100 174 101 Angola Representation of Angola separate 1 from the rest of the back a possible Clark "sense of Congress" and the rest of the back a possible Clark "sense of Congress" internaling to the registrant's state while carrying beyond the registrant's state while carrying beyond the registrant's state to back a possible Clark "sense of Congress" internaling to the states, should be left to states, while carrying beyond the registrant's state while Clark "sense of Congress" internaling to the states, should be left to states, while carrying beyond the registrant's state will control to the states. The states are possible clark "sense of Congress" internaling to the states, should be left to states. ment economy. I was a principal architect of the 1971 Emergency Employment Act, the Comprehensive Employment and Training Act of 1973, and the Emergency Jobs and Unemployment Assistance Act of 1974. I have worked hard to provide adequate funding for these programs, and I pledge to continue my efforts in these areas.

I am developing a new public service employment program designed to provide a job to every household where a person is receiving unemployment compensation or welfare benefits. I think this kind of use of Federal dollars makes far more economic, human, and commonsense than paying people who are not contributing to our productive capacities and are being denied the self-esteem that comes with being employed in a meaningful, contributing job.

INFLATION

One of the most serious handicaps in the Nation's fight against inflation has been the lack of strong and effective leadership from the Administration. In my view, the major reason for the current high rates of inflation are food and energy costs. The keystone of the President's energy program is rapid decontrol of oil and gas prices—an action which will assure further increases in the prices of many goods and services. Future foreign sales of food grains must be accompanied by safeguards that will protect the pocketbooks of the American consumer and the American farmer.

Less intense competition in many areas of the private sector also contributes to inflation. I will continue to support vigorous enforcement of antitrust laws and staff penalties for offenders. I also believe that we, as consumers, can help fight inflation by our daily decisions in the marketplace. As Federal Reserve Chairman Arthur Burns stated in a recent speech:

The power of the consumer to force business firms to price competitively and to improve their products must never be underestimated. We as consumers can help to keep the spirit of competition alive by shopping carefully and avoiding impulse buying.

ENERGY POLICY

After more than a year of intense debate Congress and the administration, the Congress has enacted an Energy Conservation and Oil Policy Act, S. 622. This program strikes a reasonable compromise among the various competing pricing proposals-from a drastic rollback of oil prices, on the one hand, to an immediate elimination of all energy price controls on the other. The bill requires the administrative establishment of a system of crude oil prices which will yield a weighted average price of \$7.66 a barrel. Special exemptions are allowed for high-cost oil, such as that produced through expensive tertiary recovery.

This pricing policy in the bill, while far from perfect, is nevertheless a middle ground that can protect our economy from foreign energy price manipulation and still encourage new energy production at home. Moreover, by phasing out price controls over the next 4 months, we will get out from under the refer of

frame that ensures against sudden, inflationary jumps in crude oil prices.

In addition to an oil pricing policy, the Congress has agreed on a broad range of energy-related programs that can put us on the road to energy independence. Included among the provisions of S. 622 are: Mandatory automobile fuel economy standards, emergency standby authority for the President to invoke in the event of another oil embargo or other energy emergency, the creation of a strategic petroleum reserve, and improved energy efficiency standards for most home appliances.

CONTINUING EFFORTS

Revitalizing the economy and getting people back to work will continue to have my highest priority. In my State service on the Banking, Labor and Public Welfare, and Budget Committees, I am giving my most critical review to a wide range of proposals to solve our economic and social problems. I am grateful to the thousands of Californians who have assisted me with their thoughts and comments.

ANGOLA Mr. ROBERT C. BYRD, Mr. President, the conflict taking place in Angola has understandably created a considerable amount of concern in the United States as well as in other nations. The precipitous exit of the Portuguese colonial regime was executed without an adequate provision for the transfer of authority to a single native Angolan administration. Since nature and politics both abhor a vacuum, the chaotic situation which resulted was an obvious temptation to the Soviet Union and Cuba to interfere in the affairs of an incipient new black African State. The involvement of South Africa in response to the Russian-Cuban intrusion was almost predictable.

In a world in which the United States carries so much responsibility, it is natural that the Angolan dispute should become a matter of debate. Already there are those who contend that the United States is too much involved in Angola, while others have declared that our vital interests require that this Nation must become more deeply committed in the present struggle there.

Whatever course of action the United States follows, however, I would caution restraint and careful consideration. Some expert observers have interpreted the conflict in Angola between three separate independence movements essentially as an intertribal conflict. The commitment of South Africa carries with it the unfortunate possibility of a foreordained rejection by the other states of black Africa for whatever party becomes South Africa's primary ally.

Were the United States to become jointly allied with South Africa in this conflict, it could spell disaster for our future relations with most of the states of black Africa, as well as with the rest of the Third World.

Furthermore, the involvement of other foreign nations in the affairs of a coun-

is the possibility that a civil war of short duration could be transformed into an unending struggle of inexhaustible power in which literally millions of innocent men, women, and children will lose their lives for the sake of an ideological competition of whose origins and foundations they have absolutely no comprehension.

I suggest, Mr. President, that the United States is called upon to act in this present situation - but not on a battlefield. I suggest that the time has come for America to resort to a bit of 'market basket diplomacy." Predictions are that the Soviet Union is facing another bleak wheat harvest. The continuing need for American wheat by the Soviet Union offers this Nation a lever by which we might persuade the Russians that its continued meddling-and that of its Cuban satellite-not only are jeopardizing the climate of détente; the Soviet-Cuban adventure could also imperil future grain purchases from the United States. The time is right for the United States to realize some real dividends from détente in the diplomatic arena.

The situation in Angola is too fluid and unstable for the United States to risk a major commitment of its resources there. An effective exercise of diplomacy requires wisdom, foresight, and patience as well as decision and force. I urge the administration to tread cautiously and watchfully in the Angolan conflict. There are times, however, when the specter of crop shortages at home might exert a far greater influence on the Kremlin than the prospect of an ideological victory on a distant continent.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER. Is there further morning business? If not, morning business is closed.

RECESS FOR 30 MINUTES

Mr. ROBERT C. BYRD. Mr. President, I move that the Senate stand in recess for 30 minutes.

The motion was agreed to; and at 10:14 a.m., the Senate took a recess for 30 minutes.

The Senate reassembled at 10:44 a.m., when called to order by the Presiding Officer (Mr. GLENN).

EXECUTIVE SESSION

Mr. ROBERT C. BYRD. Mr. President, I move that the Senate go into executive session for the purpose of considering nominations on the executive calendar, beginning with the Department of Defense.

The motion was agreed to and the Senate proceeded to the consideration of executive business.

DEPARTMENT OF DEFENSE